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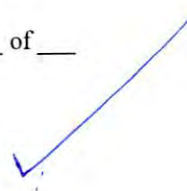
WR-35
Rev. 8/23/13

Page ___ of ___

NAME: [Signature]

DATE: 5/25/16 State of West Virginia

Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work



API 47 - 017 - 06533 County Doddridge District Grant
Quad West Union 7.5' Pad Name Melody Pad Field/Pool Name ----
Farm name Brown, Melody Well Number Yoho Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop St. City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4356600m Easting 520748m
Landing Point of Curve Northing 4356289.00m Easting 520410.78m
Bottom Hole Northing 4353667m Easting 521461m

Elevation (ft) 1135' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)

Air- Foam & 4% KCL

Mud- Polymer

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Date permit issued 7/17/2014 Date drilling commenced 11/4/2014 Date drilling ceased 2/13/2015

Date completion activities began 11/12/2015 Date completion activities ceased 2/6/2016

Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 46' Open mine(s) (Y/N) depths No

Salt water depth(s) ft 865', 1509' Void(s) encountered (Y/N) depths No

Coal depth(s) ft 1821' Cavern(s) encountered (Y/N) depths No

Is coal being mined in area (Y/N) No

Reviewed by:

AX 09/22/2016

API 47-017 - 06533 Farm name Brown, Melody Well number Yoho Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30"	20"	40'	New	94# J-55	N/A	Y
Surface	17- 1/2"	13- 3/8"	530'	New	48# H-40	N/A	Y*
Coal							
Intermediate 1	12-1/4"	9-5/8"	2571'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	16880'	New	23# P-110	N/A	Y
Tubing		2-3/8"	7265'		4.7# N-80	N/A	
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	161 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	670 sx	15.6	1.18	368	0'	8 Hrs.
Coal							
Intermediate 1	Class A	940 sx	15.6	1.18	805	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1090 sx (Lead) 1450 sx (Tail)	14.5 Lead 15.2 Tail	1.30 Lead 1.86 Tail	3393	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 16880' MD, 6945' TVD (BHL), 6951' (Deepest Point Drilled) Loggers TD (ft) 16830'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6595'

Check all wireline logs run caliper density deviated/directional induction neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
 Conductor- 0
 Surface- 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate- 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production- 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47- 017 - 06533 Farm name Brown, Melody Well number Yoho Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6805' (TOP)</u> TVD	<u>7310' (TOP)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3550 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 16187 mcfpd Oil 40 bpd NGL --- bpd Water 357 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	<u>0</u>		<u>0</u>		

***PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company LP
Address 2640 Reach Rd. City Williamsport State PA Zip 17701

Logging Company Rush Well Site Servies
Address 600 Alpha Dr. City Canonsburg State PA Zip 15317

Cementing Company Nabors Completion & Production Services, Co.
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company C & J Energy Services
Address 1650 Hackers Creek Rd. City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233
Signature [Signature] Title Permit Representative Date 4/12/2016

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API 47-017-06533 Farm Name Brown, Melody Well Number Yoho Unit 2H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	12-Nov-15	16,617	16,787	60	Marcellus
2	23-Dec-15	16,416	16,586	60	Marcellus
3	23-Dec-15	16,214	16,384	60	Marcellus
4	23-Dec-15	16,013	16,183	60	Marcellus
5	23-Dec-15	15,811	15,981	60	Marcellus
6	23-Dec-15	15,610	15,780	60	Marcellus
7	26-Dec-15	15,408	15,578	60	Marcellus
8	26-Dec-15	15,207	15,377	60	Marcellus
9	27-Dec-15	15,005	15,175	60	Marcellus
10	27-Dec-15	14,804	14,974	60	Marcellus
11	27-Dec-15	14,602	14,772	60	Marcellus
12	27-Dec-15	14,401	14,571	60	Marcellus
13	27-Dec-15	14,199	14,369	60	Marcellus
14	28-Dec-15	13,998	14,168	60	Marcellus
15	28-Dec-15	13,796	13,966	60	Marcellus
16	28-Dec-15	13,595	13,765	60	Marcellus
17	28-Dec-15	13,393	13,563	60	Marcellus
18	28-Dec-15	13,192	13,362	60	Marcellus
19	29-Dec-15	12,990	13,160	60	Marcellus
20	29-Dec-15	12,789	12,959	60	Marcellus
21	29-Dec-15	12,588	12,757	60	Marcellus
22	29-Dec-15	12,386	12,556	60	Marcellus
23	30-Dec-15	12,185	12,354	60	Marcellus
24	30-Dec-15	11,983	12,153	60	Marcellus
25	30-Dec-15	11,782	11,951	60	Marcellus
26	30-Dec-15	11,580	11,750	60	Marcellus
27	31-Dec-15	11,379	11,549	60	Marcellus
28	31-Dec-15	11,177	11,347	60	Marcellus
29	31-Dec-15	10,976	11,146	60	Marcellus
30	31-Dec-15	10,774	10,944	60	Marcellus
31	31-Dec-15	10,573	10,743	60	Marcellus
32	1-Jan-16	10,371	10,541	60	Marcellus
33	1-Jan-16	10,170	10,340	60	Marcellus
34	1-Jan-16	9,968	10,138	60	Marcellus
35	1-Jan-16	9,767	9,937	60	Marcellus
36	1-Jan-16	9,565	9,735	60	Marcellus
37	2-Jan-16	9,364	9,534	60	Marcellus
38	2-Jan-16	9,162	9,332	60	Marcellus
39	2-Jan-16	8,961	9,131	60	Marcellus
40	2-Jan-16	8,759	8,929	60	Marcellus
41	2-Jan-16	8,558	8,728	60	Marcellus
42	3-Jan-16	8,356	8,526	60	Marcellus
43	3-Jan-16	8,155	8,325	60	Marcellus
44	3-Jan-16	7,953	8,123	60	Marcellus
45	3-Jan-16	7,752	7,922	60	Marcellus
46	3-Jan-16	7,551	7,720	60	Marcellus
47	3-Jan-16	7,349	7,519	60	Marcellus

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EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	22-Dec-15	68.4	7,529	5,903	5,559	246,900	6,685	N/A
2	23-Dec-15	72.8	7,515	6,071	5,405	255,900	6,731	N/A
3	23-Dec-15	71.6	7,413	5,990	5,586	251,000	6,562	N/A
4	23-Dec-15	73.5	7,531	5,989	5,146	234,500	7,164	N/A
5	23-Dec-15	73.5	7,492	6,172	5,185	252,200	6,608	N/A
6	23-Dec-15	76.5	7,499	6,124	5,764	254,900	6,682	N/A
7	26-Dec-15	71.2	7,719	6,798	5,035	212,500	7,156	N/A
8	26-Dec-15	75.2	7,355	5,751	5,452	253,600	6,614	N/A
9	27-Dec-15	75.7	7,565	6,277	5,574	250,400	6,542	N/A
10	27-Dec-15	76.2	7,597	7,011	5,132	243,800	6,477	N/A
11	27-Dec-15	77.8	7,503	6,269	4,812	250,200	6,509	N/A
12	27-Dec-15	77.8	7,645	6,844	5,384	217,600	7,115	N/A
13	27-Dec-15	76.5	7,420	6,706	5,591	251,900	6,474	N/A
14	28-Dec-15	74.9	7,209	6,428	5,009	253,900	6,529	N/A
15	28-Dec-15	78.0	7,375	6,062	5,142	251,800	6,625	N/A
16	28-Dec-15	77.4	7,102	6,586	5,047	250,800	6,422	N/A
17	28-Dec-15	68.0	7,515	6,968	4,867	197,100	6,887	N/A
18	28-Dec-15	71.2	7,368	7,089	5,006	229,000	6,962	N/A
19	29-Dec-15	71.5	6,893	7,011	4,660	253,400	6,520	N/A
20	29-Dec-15	72.4	7,075	6,657	5,171	237,600	6,241	N/A
21	29-Dec-15	71.1	7,049	9,502	5,551	251,700	6,406	N/A
22	29-Dec-15	68.9	7,289	6,270	4,915	250,900	6,361	N/A
23	30-Dec-15	68.9	7,121	5,749	5,412	251,900	6,496	N/A
24	30-Dec-15	71.4	6,830	5,492	4,888	250,100	6,333	N/A
25	30-Dec-15	72.6	6,942	5,878	5,471	252,700	6,278	N/A
26	30-Dec-15	68.6	6,978	5,577	4,197	253,400	6,353	N/A
27	31-Dec-15	72.3	7,088	5,815	5,103	250,900	6,304	N/A
28	31-Dec-15	72.4	6,850	5,718	5,428	252,600	6,278	N/A
29	31-Dec-15	69.4	7,094	5,764	5,316	254,000	6,266	N/A
30	31-Dec-15	67.2	6,843	5,640	4,475	251,600	6,275	N/A
31	31-Dec-15	66.5	6,810	6,079	4,907	252,800	6,324	N/A
32	1-Jan-16	72.9	6,761	6,145	5,303	253,000	6,307	N/A
33	1-Jan-16	73.4	6,776	6,237	5,146	254,000	6,253	N/A
34	1-Jan-16	74.2	6,952	6,261	5,344	251,400	6,237	N/A
35	1-Jan-16	73.8	6,916	5,791	5,814	252,000	6,327	N/A
36	1-Jan-16	69.9	6,847	5,676	4,927	252,700	6,224	N/A
37	2-Jan-16	66.6	7,051	6,426	5,079	155,200	6,743	N/A
38	2-Jan-16	66.7	7,467	6,130	5,502	184,800	6,748	N/A
39	2-Jan-16	68.4	6,652	6,526	5,757	253,400	6,138	N/A
40	2-Jan-16	68.2	7,122	5,682	4,825	216,000	6,193	N/A
41	2-Jan-16	71.6	6,834	5,962	4,577	250,300	6,236	N/A
42	3-Jan-16	71.6	6,738	6,145	4,849	248,200	5,659	N/A
43	3-Jan-16	77.1	6,466	5,741	5,270	254,400	6,081	N/A
44	3-Jan-16	77.6	6,551	5,775	5,573	253,200	6,097	N/A
45	3-Jan-16	76.7	6,304	5,410	5,323	253,600	6,080	N/A
46	3-Jan-16	74.0	6,280	5,128	5,098	252,800	6,134	N/A
47	3-Jan-16	71.9	6,096	6,006	4,203	249,700	6,112	N/A
AVG=		72.4	7,086	6,196	5,166	11,456,300	302,746	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Freshwater	46'	N/A	46'	N/A
Silt	0	81	0	81
Sandstone	est. 81	281	est. 81	281
siltstone (trace coal)	est. 281	401	est. 281	401
Silty Sandstone	est. 401	581	est. 401	581
Sandy siltstone	est. 581	761	est. 581	761
Limestone	est. 761	781	est. 761	781
Sandy siltstone	est. 781	861	est. 781	861
Limey Siltstone	est. 861	961	est. 861	961
Sandy shale	est. 961	1281	est. 961	1281
Sandstone	est. 1281	1401	est. 1281	1401
Sandy shale	est. 1401	1561	est. 1401	1561
Silty Sandstone (trace coal)	est. 1561	1761	est. 1561	1761
Sandstone	est. 1761	1821	est. 1761	1821
Coal	est. 1821	2001	est. 1821	2001
Limey Siltstone	est. 2001	2066	est. 2001	2068
Big Lime	2066	2187	2068	2189
Big Injun	2187	2614	2189	2614
Gantz Sand	2614	2757	2614	2759
Fifty Foot Sandstone	2757	2826	2759	2829
Gordon	2826	3166	2829	3168
Fifth Sandstone	3166	3204	3168	3207
Bayard	3204	3566	3207	3569
Warren	3566	3963	3569	3967
Speechley	3963	4204	3967	5214
Baltown	4204	4672	5214	4720
Bradford	4672	5146	4720	5252
Benson	5146	5386	5252	5526
Alexander	5386	5595	5526	5760
Elk	5595	6082	5760	6300
Rhinestreet	6082	6420	6300	6688
Sycamore	6420	6590	6688	6927
Middlesex	6590	6725	6927	7138
Burkett	6725	6754	7138	7192
Tully	6754	6805	7192	7310
Marcellus	6805	NA	7310	NA

*Please note Antero determines shallow formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

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Antero
Yoho Unit 2H
Doddridge County WV
Northing: 14292563.29
Easting: 1708440.97
As Drilled

WELL DETAILS: Yoho Unit 2H
 Ground Level: 1135.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	14292563.29	1708440.97	39° 21' 30.671 N	80° 45' 33.636 W	

REFERENCE INFORMATION
 Co-ordinate (NE) Reference: Well Yoho Unit 2H, Grid North
 Vertical (TVS) Reference: Precision 5.25: GL 1135' + KB 19' @ 1154.0' Outfit
 Section (VS) Reference: Slot - @ DN, 0.0E
 Measured Depth Reference: Precision 5.25: GL 1135' + KB 19' @ 1154.0' Outfit
 Calculation Method: Minimum Curvature



PROJECT DETAILS: Doddridge County WV
 Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level

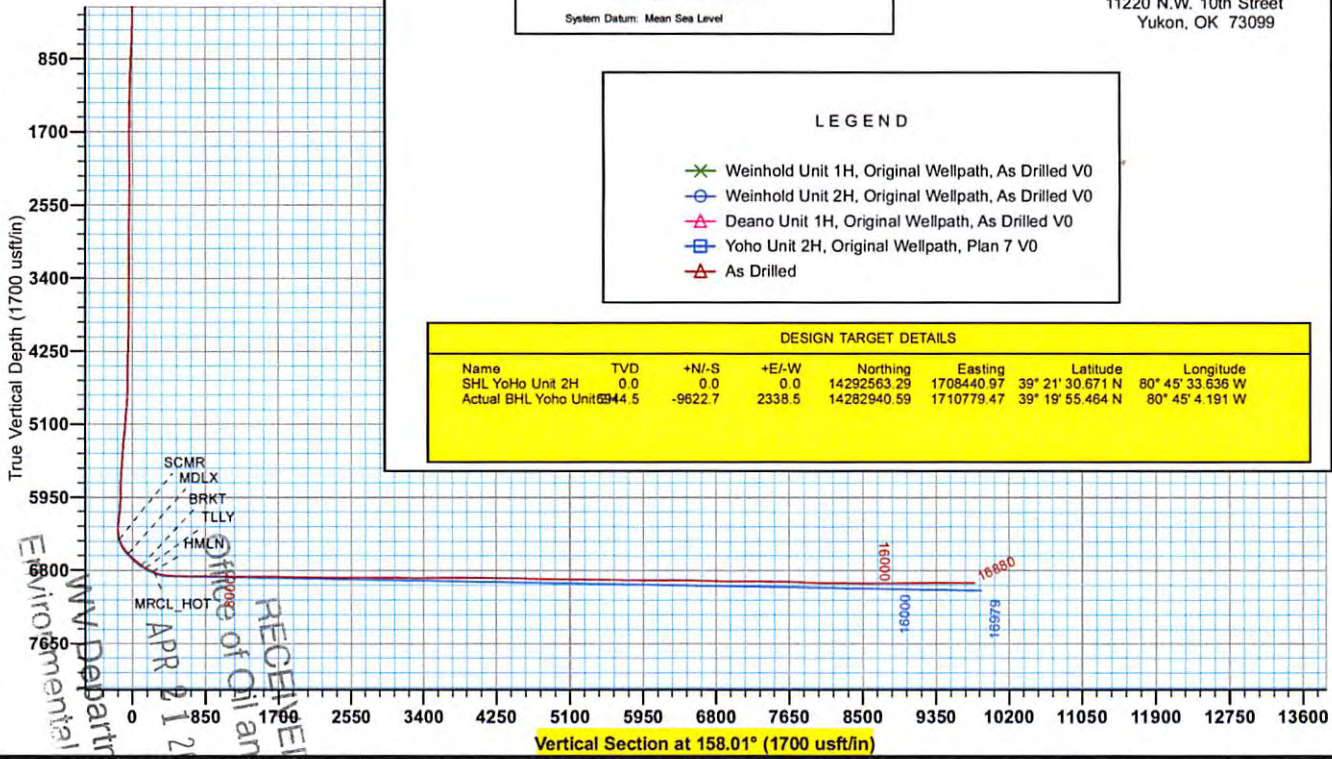
Genie Lightfoot
 14:37, February 11 2015
 Scientific Drilling
 11220 N.W. 10th Street
 Yukon, OK 73099

LEGEND

- ✕ Weinhold Unit 1H, Original Wellpath, As Drilled V0
- Weinhold Unit 2H, Original Wellpath, As Drilled V0
- △ Deano Unit 1H, Original Wellpath, As Drilled V0
- Yoho Unit 2H, Original Wellpath, Plan V 0
- △ As Drilled

DESIGN TARGET DETAILS

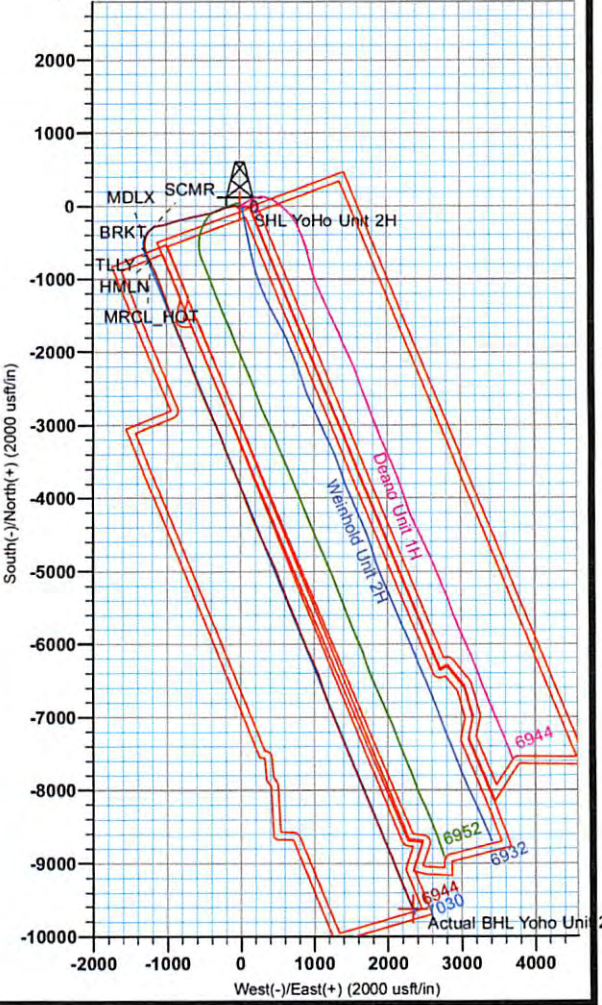
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL YoHo Unit 2H	0.0	0.0	0.0	14292563.29	1708440.97	39° 21' 30.671 N	80° 45' 33.636 W
Actual BHL Yoho Unit 2H	6944.5	-9622.7	2338.5	14282940.59	1710779.47	39° 19' 55.464 N	80° 45' 4.191 W



To convert Magnetic North to Grid, Subtract 8.66°
 To convert True North to Grid, Subtract 0.15°

Azimuths to Grid North
 True North: -0.15°
 Magnetic North: -8.66°

Magnetic Field
 Strength: 52244.6nT
 Dip Angle: 66.89°
 Date: 10/23/2014
 Model: BGGM2014



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Antero

Doddridge County WV
Melody Pad
Yoho Unit 2H
Original Wellpath

Design: As Drilled

EOW Completion Report

11 February, 2015



Scientific Drilling

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07/22/2016



EOW Completion Report



Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Project	Doddridge County WV, McClellan District		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Melody Pad				
Site Position:		Northing:	14,292,537.54 usft	Latitude:	39° 21' 30.416 N
From:	Map	Easting:	1,708,455.40 usft	Longitude:	80° 45' 33.453 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.15 °

Well	Yoho Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,292,563.29 usft	Latitude:	39° 21' 30.671 N
	+E/-W	0.0 usft	Easting:	1,708,440.97 usft	Longitude:	80° 45' 33.636 W
Position Uncertainty	2.0 usft		Wellhead Elevation:	1,154.0 usft	Ground Level:	1,135.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	10/23/2014	-8.51	66.89	52,245

Design	As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	158.01	

Survey Program	Date 2/11/2015				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
25.0	6,368.0	Survey #7 Final Gyro KOP (Original Wellp	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
6,460.0	16,880.0	Survey #8 MWD Surveys (Original Wellpa	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00	
25.0	0.33	124.07	25.0	0.0	0.1	0.1	0.1	1.32	
50.0	0.58	122.42	50.0	-0.1	0.2	0.2	0.2	1.00	
75.0	0.42	107.78	75.0	-0.2	0.4	0.4	0.4	0.81	
100.0	0.65	122.53	100.0	-0.3	0.6	0.6	0.6	1.07	
125.0	0.77	123.78	125.0	-0.5	0.9	0.9	0.9	0.48	
150.0	1.04	123.36	150.0	-0.7	1.2	1.1	1.1	1.08	
175.0	1.07	125.77	175.0	-1.0	1.6	1.5	1.5	0.21	
200.0	1.11	125.76	200.0	-1.3	2.0	1.9	1.9	0.16	
225.0	0.85	134.26	225.0	-1.5	2.3	2.3	2.3	0.09	
250.0	0.75	148.45	250.0	-1.8	2.5	2.6	2.6	0.88	

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EOW Completion Report



Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
275.0	0.46	167.06	275.0	-2.1	2.6	2.9	1.39
300.0	0.40	204.32	300.0	-2.2	2.6	3.0	1.12
325.0	0.63	238.89	325.0	-2.4	2.5	3.1	1.51
350.0	0.83	250.47	350.0	-2.5	2.2	3.1	0.99
375.0	1.24	262.23	375.0	-2.6	1.7	3.1	1.84
400.0	1.56	269.08	400.0	-2.7	1.1	2.9	1.44
425.0	1.94	271.12	424.9	-2.6	0.4	2.6	1.54
450.0	2.41	273.00	449.9	-2.6	-0.6	2.2	1.90
475.0	2.70	272.80	474.9	-2.6	-1.7	1.7	1.16
500.0	3.34	274.22	499.9	-2.5	-3.0	1.2	2.58
525.0	3.64	274.03	524.8	-2.4	-4.5	0.5	1.20
550.0	4.57	272.50	549.8	-2.3	-6.3	-0.3	3.75
575.0	4.96	273.21	574.7	-2.2	-8.4	-1.1	1.58
600.0	5.42	273.35	599.6	-2.0	-10.6	-2.1	1.84
625.0	5.58	273.70	624.5	-1.9	-13.0	-3.1	0.65
650.0	5.74	274.49	649.3	-1.7	-15.5	-4.2	0.71
675.0	5.97	275.85	674.2	-1.5	-18.0	-5.4	1.07
700.0	6.07	277.14	699.1	-1.2	-20.6	-6.6	0.67
725.0	6.04	278.37	723.9	-0.8	-23.2	-7.9	0.53
750.0	6.13	279.70	748.8	-0.4	-25.9	-9.3	0.67
775.0	5.86	279.66	773.6	0.0	-28.4	-10.7	1.08
800.0	5.83	280.00	798.5	0.5	-30.9	-12.0	0.18
825.0	5.58	280.42	823.4	0.9	-33.4	-13.3	1.01
850.0	5.03	282.89	848.3	1.4	-35.7	-14.6	2.38
875.0	4.23	287.05	873.2	1.9	-37.6	-15.8	3.47
900.0	4.01	286.49	898.1	2.4	-39.3	-17.0	0.89
925.0	4.01	284.86	923.1	2.9	-41.0	-18.0	0.46
950.0	3.73	284.79	948.0	3.3	-42.6	-19.0	1.12
975.0	3.76	285.37	973.0	3.7	-44.2	-20.0	0.19
1,000.0	3.42	285.23	997.9	4.1	-45.7	-21.0	1.36
1,025.0	3.31	286.17	1,022.9	4.5	-47.1	-21.9	0.49
1,050.0	3.22	285.29	1,047.8	4.9	-48.5	-22.7	0.41
1,075.0	3.15	286.33	1,072.8	5.3	-49.8	-23.6	0.36
1,100.0	2.81	285.95	1,097.8	5.7	-51.1	-24.4	1.36
1,125.0	2.53	284.55	1,122.7	6.0	-52.2	-25.1	1.15
1,150.0	2.52	284.20	1,147.7	6.2	-53.3	-25.7	0.07
1,175.0	2.45	285.53	1,172.7	6.5	-54.3	-26.4	0.36
1,200.0	2.64	285.85	1,197.7	6.8	-55.4	-27.7	0.76
1,225.0	2.21	284.29	1,222.6	7.1	-56.4	-27.7	1.74
1,250.0	2.24	283.61	1,247.6	7.3	-57.4	-28.3	0.16
1,275.0	1.96	285.32	1,272.6	7.6	-58.3	-28.8	1.15
1,300.0	2.00	284.88	1,297.6	7.8	-59.1	-29.3	0.17
1,325.0	1.86	284.09	1,322.6	8.0	-59.9	-29.8	0.57
1,350.0	1.79	283.32	1,347.6	8.2	-60.7	-30.8	0.30

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Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,375.0	1.70	281.93	1,372.6	8.4	-61.4	-30.7	0.40
1,400.0	1.64	284.53	1,397.5	8.5	-62.1	-31.2	0.39
1,425.0	1.70	282.93	1,422.5	8.7	-62.8	-31.6	0.30
1,450.0	1.53	278.73	1,447.5	8.8	-63.5	-32.0	0.83
1,475.0	1.46	278.25	1,472.5	8.9	-64.2	-32.3	0.28
1,500.0	1.35	276.92	1,497.5	9.0	-64.8	-32.6	0.46
1,525.0	1.31	274.67	1,522.5	9.1	-65.4	-32.9	0.26
1,550.0	1.33	276.43	1,547.5	9.1	-65.9	-33.1	0.18
1,575.0	1.24	275.37	1,572.5	9.2	-66.5	-33.4	0.37
1,600.0	1.19	277.12	1,597.5	9.2	-67.0	-33.7	0.25
1,625.0	0.99	272.56	1,622.5	9.3	-67.5	-33.9	0.87
1,650.0	1.02	272.02	1,647.5	9.3	-67.9	-34.1	0.13
1,675.0	0.98	272.24	1,672.5	9.3	-68.4	-34.2	0.16
1,700.0	0.87	270.94	1,697.5	9.3	-68.8	-34.4	0.45
1,725.0	0.68	269.67	1,722.5	9.3	-69.1	-34.5	0.76
1,750.0	0.69	266.74	1,747.5	9.3	-69.4	-34.6	0.15
1,775.0	0.63	267.75	1,772.5	9.3	-69.7	-34.7	0.24
1,800.0	0.66	267.34	1,797.5	9.3	-70.0	-34.8	0.12
1,825.0	0.67	270.01	1,822.5	9.3	-70.3	-34.9	0.13
1,850.0	0.56	263.57	1,847.5	9.3	-70.5	-35.0	0.52
1,875.0	0.50	251.88	1,872.5	9.2	-70.8	-35.0	0.49
1,900.0	0.57	257.10	1,897.5	9.2	-71.0	-35.1	0.34
1,925.0	0.65	259.22	1,922.5	9.1	-71.2	-35.1	0.33
1,950.0	0.54	255.12	1,947.5	9.0	-71.5	-35.2	0.47
1,975.0	0.57	262.46	1,972.4	9.0	-71.7	-35.2	0.31
2,000.0	0.54	253.58	1,997.4	9.0	-72.0	-35.2	0.36
2,025.0	0.53	253.20	2,022.4	8.9	-72.2	-35.3	0.04
2,050.0	0.53	255.81	2,047.4	8.8	-72.4	-35.3	0.10
2,075.0	0.47	257.79	2,072.4	8.8	-72.6	-35.3	0.25
2,100.0	0.43	258.19	2,097.4	8.7	-72.8	-35.4	0.16
2,125.0	0.47	272.11	2,122.4	8.7	-73.0	-35.4	0.46
2,150.0	0.46	241.23	2,147.4	8.7	-73.2	-35.5	0.99
2,175.0	0.32	246.49	2,172.4	8.6	-73.4	-35.4	0.58
2,200.0	0.35	253.54	2,197.4	8.5	-73.5	-35.4	0.20
2,225.0	0.32	243.75	2,222.4	8.5	-73.6	-35.4	0.26
2,250.0	0.44	245.64	2,247.4	8.4	-73.8	-35.4	0.48
2,275.0	0.34	250.10	2,272.4	8.4	-73.9	-35.4	0.42
2,300.0	0.31	232.67	2,297.4	8.3	-74.1	-35.4	0.41
2,325.0	0.31	243.49	2,322.4	8.2	-74.2	-35.4	0.23
2,350.0	0.37	258.05	2,347.4	8.2	-74.3	-35.4	0.42
2,375.0	0.29	267.72	2,372.4	8.2	-74.5	-35.4	0.39
2,400.0	0.39	270.22	2,397.4	8.2	-74.6	-35.5	0.40
2,425.0	0.42	286.96	2,422.4	8.2	-74.8	-35.6	0.49
2,450.0	0.39	262.39	2,447.4	8.2	-74.9	-35.7	0.70
2,475.0	0.41	273.89	2,472.4	8.2	-75.1	-35.7	0.33

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Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
2,500.0	0.41	278.23	2,497.4	8.2	-75.3	-35.8	0.12
2,525.0	0.39	283.59	2,522.4	8.2	-75.5	-35.9	0.17
2,550.0	0.41	283.07	2,547.4	8.3	-75.6	-36.0	0.08
2,575.0	0.39	285.06	2,572.4	8.3	-75.8	-36.1	0.10
2,600.0	0.34	280.20	2,597.4	8.4	-76.0	-36.2	0.24
2,625.0	0.40	273.74	2,622.4	8.4	-76.1	-36.3	0.29
2,650.0	0.44	276.40	2,647.4	8.4	-76.3	-36.4	0.18
2,675.0	0.41	274.56	2,672.4	8.4	-76.5	-36.4	0.13
2,700.0	0.51	275.04	2,697.4	8.4	-76.7	-36.5	0.40
2,725.0	0.44	274.41	2,722.4	8.4	-76.9	-36.6	0.28
2,750.0	0.36	265.19	2,747.4	8.4	-77.1	-36.7	0.41
2,775.0	0.41	253.66	2,772.4	8.4	-77.2	-36.7	0.37
2,800.0	0.47	258.14	2,797.4	8.4	-77.4	-36.8	0.28
2,825.0	0.70	265.49	2,822.4	8.3	-77.7	-36.8	0.97
2,850.0	0.45	276.18	2,847.4	8.3	-77.9	-36.9	1.08
2,875.0	0.41	261.47	2,872.4	8.3	-78.1	-37.0	0.47
2,900.0	0.48	284.54	2,897.4	8.3	-78.3	-37.1	0.76
2,925.0	0.63	277.10	2,922.4	8.4	-78.5	-37.2	0.66
2,950.0	0.65	289.72	2,947.4	8.5	-78.8	-37.3	0.57
2,975.0	0.71	284.16	2,972.4	8.5	-79.1	-37.5	0.36
3,000.0	0.75	280.51	2,997.4	8.6	-79.4	-37.7	0.25
3,025.0	0.76	281.62	3,022.4	8.7	-79.7	-37.9	0.07
3,050.0	0.83	281.07	3,047.4	8.7	-80.1	-38.1	0.28
3,075.0	0.83	278.35	3,072.4	8.8	-80.4	-38.3	0.16
3,100.0	0.89	276.38	3,097.4	8.8	-80.8	-38.5	0.27
3,125.0	0.83	275.79	3,122.4	8.9	-81.2	-38.6	0.24
3,150.0	0.86	271.17	3,147.4	8.9	-81.5	-38.8	0.30
3,175.0	0.82	272.26	3,172.4	8.9	-81.9	-38.9	0.17
3,200.0	0.69	284.03	3,197.4	9.0	-82.2	-39.1	0.81
3,225.0	0.54	287.12	3,222.4	9.0	-82.5	-39.3	0.61
3,250.0	0.54	288.82	3,247.4	9.1	-82.7	-39.4	0.06
3,275.0	0.55	279.55	3,272.4	9.2	-82.9	-39.6	0.35
3,300.0	0.55	282.73	3,297.4	9.2	-83.2	-39.7	0.12
3,325.0	0.60	276.23	3,322.4	9.3	-83.4	-39.8	0.33
3,350.0	0.58	275.66	3,347.4	9.3	-83.7	-39.9	0.08
3,375.0	0.66	265.05	3,372.4	9.3	-83.9	-40.0	0.56
3,400.0	0.64	268.12	3,397.4	9.3	-84.2	-40.1	0.16
3,425.0	0.66	284.40	3,422.4	9.3	-84.5	-40.3	0.74
3,450.0	0.81	288.37	3,447.4	9.4	-84.8	-40.4	0.27
3,475.0	0.64	275.67	3,472.4	9.4	-85.0	-40.6	0.57
3,500.0	0.66	274.69	3,497.4	9.5	-85.3	-40.7	0.09
3,525.0	0.62	274.84	3,522.4	9.5	-85.6	-40.8	0.16
3,550.0	0.62	271.50	3,547.4	9.5	-85.9	-41.0	0.14
3,575.0	0.64	268.80	3,572.4	9.5	-86.1	-41.1	0.14

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EOW Completion Report



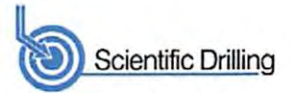
Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
3,600.0	0.62	269.43	3,597.4	9.5	-86.4	-41.2	0.08	
3,625.0	0.91	255.07	3,622.4	9.4	-86.7	-41.2	1.38	
3,650.0	1.49	249.60	3,647.4	9.3	-87.2	-41.3	2.36	
3,675.0	2.04	245.42	3,672.4	9.0	-88.0	-41.3	2.26	
3,700.0	2.63	244.55	3,697.3	8.5	-88.9	-41.2	2.36	
3,725.0	3.25	245.37	3,722.3	8.0	-90.0	-41.1	2.49	
3,750.0	3.75	245.44	3,747.3	7.4	-91.4	-41.1	2.00	
3,775.0	4.70	245.95	3,772.2	6.6	-93.1	-41.0	3.80	
3,800.0	5.14	246.00	3,797.1	5.7	-95.1	-40.9	1.76	
3,825.0	6.11	247.46	3,822.0	4.8	-97.3	-40.9	3.92	
3,850.0	6.72	246.48	3,846.8	3.7	-99.9	-40.8	2.48	
3,875.0	7.51	248.12	3,871.6	2.5	-102.7	-40.8	3.26	
3,900.0	8.26	249.53	3,896.4	1.2	-105.9	-40.8	3.10	
3,925.0	9.04	250.63	3,921.1	0.0	-109.5	-41.0	3.19	
3,950.0	9.49	250.81	3,945.8	-1.4	-113.3	-41.2	1.80	
3,975.0	9.84	251.44	3,970.4	-2.7	-117.2	-41.4	1.46	
4,000.0	10.38	251.68	3,995.0	-4.1	-121.4	-41.7	2.17	
4,025.0	10.78	252.42	4,019.6	-5.5	-125.8	-42.0	1.69	
4,050.0	11.12	252.89	4,044.2	-6.9	-130.3	-42.4	1.41	
4,075.0	11.58	253.31	4,068.7	-8.4	-135.0	-42.8	1.87	
4,100.0	12.21	253.24	4,093.1	-9.9	-140.0	-43.3	2.52	
4,125.0	12.81	254.12	4,117.5	-11.4	-145.1	-43.8	2.52	
4,150.0	13.35	255.19	4,141.9	-12.9	-150.6	-44.5	2.37	
4,175.0	13.89	255.66	4,166.2	-14.3	-156.3	-45.2	2.20	
4,200.0	14.36	256.59	4,190.4	-15.8	-162.2	-46.1	2.09	
4,225.0	15.04	257.90	4,214.6	-17.2	-168.4	-47.1	3.03	
4,250.0	15.54	257.95	4,238.7	-18.6	-174.9	-48.2	2.00	
4,275.0	16.25	258.18	4,262.8	-20.0	-181.6	-49.4	2.85	
4,300.0	16.67	256.91	4,286.7	-21.5	-188.5	-50.6	2.21	
4,325.0	17.74	254.37	4,310.6	-23.4	-195.6	-51.6	5.23	
4,350.0	18.34	252.79	4,334.4	-25.6	-203.1	-52.3	3.10	
4,375.0	19.12	251.50	4,358.1	-28.0	-210.7	-52.9	3.53	
4,400.0	20.27	250.42	4,381.6	-30.8	-218.7	-53.3	4.82	
4,425.0	21.05	250.02	4,405.0	-33.8	-227.0	-53.7	3.17	
4,450.0	22.12	248.92	4,428.2	-37.0	-235.6	-53.9	4.58	
4,475.0	22.96	248.40	4,451.3	-40.5	-244.5	-54.0	3.45	
4,500.0	24.30	247.39	4,474.2	-44.2	-253.8	-54.0	5.60	
4,525.0	24.88	247.00	4,497.0	-48.3	-263.4	-53.9	2.41	
4,550.0	26.02	246.39	4,519.5	-52.5	-273.2	-53.6	4.68	
4,575.0	26.70	246.97	4,541.9	-56.9	-283.4	-53.3	2.91	
4,600.0	27.20	247.62	4,564.2	-61.3	-293.9	-53.2	2.32	
4,625.0	26.38	247.18	4,586.5	-65.6	-304.3	-53.1	3.37	
4,650.0	26.35	247.05	4,608.9	-69.9	-314.5	-52.9	2.26	
4,675.0	25.42	248.96	4,631.4	-74.0	-324.6	-52.9	5.00	

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Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
4,700.0	25.48	249.32	4,654.0	-77.9	-334.7	-53.1	0.66
4,725.0	24.87	249.80	4,676.6	-81.6	-344.6	-53.4	2.57
4,750.0	24.85	250.37	4,699.3	-85.2	-354.5	-53.8	0.96
4,775.0	25.27	251.51	4,722.0	-88.6	-364.5	-54.3	2.56
4,800.0	25.62	252.36	4,744.5	-91.9	-374.7	-55.1	2.02
4,825.0	26.30	253.02	4,767.0	-95.2	-385.2	-56.0	2.96
4,850.0	27.35	253.79	4,789.3	-98.4	-396.0	-57.0	4.42
4,875.0	27.77	254.14	4,811.5	-101.6	-407.1	-58.2	1.80
4,900.0	27.95	255.15	4,833.6	-104.7	-418.4	-59.6	2.02
4,925.0	28.18	255.80	4,855.7	-107.7	-429.8	-61.1	1.53
4,950.0	28.04	257.08	4,877.7	-110.4	-441.2	-62.8	2.48
4,975.0	27.82	257.69	4,899.8	-113.0	-452.6	-64.7	1.44
5,000.0	27.49	258.56	4,921.9	-115.4	-464.0	-66.8	2.09
5,025.0	27.30	258.63	4,944.1	-117.6	-475.3	-68.9	0.77
5,050.0	27.07	258.10	4,966.4	-119.9	-486.5	-70.9	1.34
5,075.0	26.94	257.71	4,988.6	-122.3	-497.6	-72.9	0.88
5,100.0	26.95	257.07	5,010.9	-124.8	-508.6	-74.7	1.16
5,125.0	27.01	256.91	5,033.2	-127.3	-519.7	-76.5	0.38
5,150.0	27.30	256.27	5,055.5	-130.0	-530.8	-78.2	1.65
5,175.0	27.87	255.93	5,077.6	-132.8	-542.0	-79.8	2.37
5,200.0	28.05	255.81	5,099.7	-135.6	-553.4	-81.4	0.75
5,225.0	28.42	255.86	5,121.7	-138.5	-564.8	-83.0	1.48
5,250.0	28.98	255.97	5,143.7	-141.5	-576.5	-84.7	2.25
5,275.0	29.51	256.62	5,165.5	-144.3	-588.3	-86.5	2.47
5,300.0	29.74	257.50	5,187.2	-147.1	-600.4	-88.4	1.97
5,325.0	29.61	259.01	5,208.9	-149.6	-612.5	-90.6	3.04
5,350.0	29.60	260.44	5,230.7	-151.8	-624.7	-93.1	2.83
5,375.0	29.24	260.76	5,252.4	-153.8	-636.8	-95.8	1.57
5,400.0	28.67	260.15	5,274.3	-155.8	-648.7	-98.4	2.57
5,425.0	28.04	258.79	5,296.3	-158.0	-660.4	-100.8	3.61
5,450.0	27.17	257.48	5,318.5	-160.4	-671.7	-102.8	4.24
5,475.0	26.62	256.52	5,340.8	-162.9	-682.7	-104.6	2.80
5,500.0	26.73	255.61	5,363.1	-165.6	-693.6	-106.1	1.69
5,525.0	27.11	254.86	5,385.4	-168.5	-704.6	-107.6	2.04
5,550.0	27.49	254.72	5,407.6	-171.5	-715.6	-108.9	1.54
5,575.0	27.94	255.04	5,429.7	-174.6	-726.9	-110.3	1.90
5,600.0	27.70	254.95	5,451.8	-177.6	-738.1	-111.7	0.97
5,625.0	27.40	254.89	5,474.0	-180.6	-749.3	-113.1	0.21
5,650.0	27.21	255.66	5,496.2	-183.5	-760.4	-114.6	1.60
5,675.0	27.02	257.07	5,518.5	-186.2	-771.5	-116.2	2.68
5,700.0	26.57	257.49	5,540.8	-188.7	-782.5	-118.0	1.95
5,725.0	26.25	257.28	5,563.2	-191.1	-793.3	-119.8	1.33
5,750.0	26.14	256.86	5,585.6	-193.6	-804.1	-121.6	0.86
5,775.0	26.08	256.19	5,608.1	-196.1	-814.8	-123.2	0.20

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EOW Completion Report



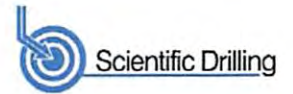
Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,800.0	25.56	255.73	5,630.6	-198.8	-825.3	-124.7	2.23
5,825.0	25.47	255.39	5,653.1	-201.5	-835.8	-126.1	0.69
5,850.0	25.61	256.00	5,675.7	-204.1	-846.2	-127.6	1.19
5,875.0	25.50	255.90	5,698.2	-206.7	-856.7	-129.1	0.47
5,900.0	25.19	256.10	5,720.8	-209.3	-867.0	-130.6	1.29
5,925.0	25.08	256.31	5,743.5	-211.9	-877.4	-132.1	0.57
5,950.0	25.32	256.45	5,766.1	-214.4	-887.7	-133.6	0.99
5,975.0	25.20	255.71	5,788.7	-216.9	-898.1	-135.1	1.35
6,000.0	25.07	254.06	5,811.3	-219.7	-908.3	-136.4	2.85
6,025.0	25.08	252.45	5,834.0	-222.8	-918.5	-137.4	2.73
6,050.0	25.02	250.15	5,856.6	-226.2	-928.5	-138.0	3.90
6,075.0	24.46	247.56	5,879.3	-229.9	-938.2	-138.1	4.88
6,100.0	24.25	246.86	5,902.1	-233.9	-947.7	-138.0	1.43
6,125.0	24.19	247.52	5,924.9	-237.9	-957.2	-137.8	1.11
6,150.0	24.19	249.34	5,947.7	-241.7	-966.7	-137.9	2.98
6,175.0	24.61	251.07	5,970.5	-245.2	-976.4	-138.3	3.32
6,200.0	25.63	251.69	5,993.1	-248.5	-986.5	-138.9	4.21
6,225.0	26.40	252.11	6,015.6	-251.9	-996.9	-139.7	3.17
6,250.0	26.66	253.16	6,037.9	-255.3	-1,007.6	-140.6	2.14
6,275.0	26.89	255.20	6,060.3	-258.4	-1,018.4	-141.8	3.79
6,300.0	26.77	258.03	6,082.6	-261.0	-1,029.4	-143.5	5.13
6,325.0	26.64	260.37	6,104.9	-263.1	-1,040.4	-145.6	4.24
6,350.0	26.80	261.94	6,127.2	-264.8	-1,051.5	-148.2	2.90
6,368.0	27.26	262.65	6,143.3	-265.9	-1,059.7	-150.2	3.11
6,460.0	26.64	259.76	6,225.3	-272.3	-1,100.8	-159.7	1.58
6,505.0	26.29	259.58	6,265.6	-275.9	-1,120.6	-163.8	0.80
6,550.0	26.56	255.63	6,305.9	-280.1	-1,140.1	-167.1	3.95
6,595.0	29.11	243.14	6,345.7	-287.6	-1,159.6	-167.5	14.11
6,640.0	32.27	234.88	6,384.4	-299.5	-1,179.2	-163.9	11.69
6,684.0	36.23	229.08	6,420.8	-314.7	-1,198.7	-157.0	11.66
6,707.0	38.48	225.97	6,439.1	-324.2	-1,209.0	-152.1	12.77
SMR							
6,729.0	40.71	223.28	6,456.0	-334.2	-1,218.8	-146.5	12.77
6,774.0	44.76	218.36	6,489.1	-357.3	-1,238.7	-132.5	11.66
6,819.0	45.11	210.63	6,521.0	-383.4	-1,256.7	-115.0	12.15
6,864.0	45.55	202.01	6,552.6	-412.1	-1,270.8	-93.8	13.65
6,909.0	46.25	195.60	6,583.9	-442.6	-1,281.2	-69.3	10.34
6,946.0	47.96	190.87	6,609.1	-469.0	-1,287.4	-47.2	10.45
MDLX							
6,954.0	48.36	189.88	6,614.5	-474.9	-1,288.5	-42.1	10.45
6,999.0	49.24	183.12	6,644.1	-508.5	-1,292.3	-12.4	11.47
7,043.0	50.21	176.70	6,672.6	-542.0	-1,292.2	18.7	11.35
7,088.0	50.39	169.84	6,701.4	-576.4	-1,288.2	52.1	11.35
7,133.0	52.58	162.90	6,729.4	-610.5	-1,279.9	86.9	13.01

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EOW Completion Report



Company: Antero	Local Co-ordinate Reference: Well Yoho Unit 2H
Project: Doddridge County WV	TVD Reference: Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site: Melody Pad	MD Reference: Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well: Yoho Unit 2H	North Reference: Grid
Wellbore: Original Wellpath	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
7,157.0	54.68	160.89	6,743.6	-628.9	-1,273.9	106.2	11.05
BRKT							
7,178.0	56.54	159.21	6,755.5	-645.2	-1,267.9	123.5	11.05
7,211.0	59.18	157.71	6,773.1	-671.2	-1,257.7	151.4	8.89
TLLY							
7,223.0	60.15	157.19	6,779.1	-680.7	-1,253.7	161.8	8.89
7,268.0	64.02	157.10	6,800.2	-717.4	-1,238.3	201.5	8.60
7,301.0	66.85	156.06	6,813.9	-744.9	-1,226.3	231.5	9.04
HMLN							
7,313.0	67.88	155.69	6,818.5	-755.0	-1,221.8	242.6	9.04
7,329.0	69.48	155.53	6,824.3	-768.6	-1,215.7	257.5	10.04
MRCL_HOT							
7,357.0	72.28	155.25	6,833.5	-792.6	-1,204.6	283.9	10.04
7,402.0	75.77	154.74	6,845.9	-831.8	-1,186.4	327.1	7.83
7,447.0	79.40	155.17	6,855.6	-871.7	-1,167.8	371.0	8.12
7,492.0	84.50	156.92	6,861.9	-912.4	-1,149.7	415.5	11.97
7,518.0	87.14	157.45	6,863.7	-936.3	-1,139.6	441.4	10.36
7,608.0	90.04	160.35	6,866.0	-1,020.2	-1,107.2	531.4	4.56
7,698.0	90.40	160.44	6,865.6	-1,105.0	-1,077.0	621.3	0.41
7,787.0	90.40	158.95	6,865.0	-1,188.4	-1,046.2	710.2	1.67
7,877.0	88.81	160.44	6,865.6	-1,272.8	-1,014.9	800.2	2.42
7,966.0	89.08	160.09	6,867.3	-1,356.6	-984.9	889.1	0.50
8,056.0	88.99	160.09	6,868.8	-1,441.2	-954.2	979.0	0.10
8,146.0	89.08	159.82	6,870.3	-1,525.7	-923.4	1,069.0	0.32
8,235.0	89.25	159.47	6,871.6	-1,609.2	-892.4	1,157.9	0.44
8,325.0	89.60	158.68	6,872.5	-1,693.2	-860.3	1,247.9	0.96
8,415.0	89.96	155.52	6,872.8	-1,776.1	-825.3	1,337.9	3.53
8,504.0	90.13	159.56	6,872.8	-1,858.4	-791.3	1,426.9	4.54
8,594.0	89.87	158.42	6,872.8	-1,942.4	-759.0	1,516.8	1.30
8,684.0	89.16	161.32	6,873.5	-2,026.9	-728.0	1,606.8	3.32
8,773.0	88.81	159.47	6,875.1	-2,110.7	-698.2	1,695.7	2.12
8,863.0	88.55	159.91	6,877.2	-2,195.1	-667.0	1,785.6	0.57
8,953.0	89.60	159.12	6,878.6	-2,279.4	-635.5	1,875.6	1.46
9,042.0	89.52	159.65	6,879.3	-2,362.7	-604.1	1,964.6	0.60
9,132.0	89.16	159.74	6,880.3	-2,447.1	-572.9	2,054.5	0.41
9,222.0	89.25	156.84	6,881.6	-2,530.7	-539.6	2,144.5	3.22
9,312.0	89.16	156.84	6,882.8	-2,613.4	-504.2	2,234.5	0.10
9,402.0	89.60	157.19	6,883.8	-2,696.2	-469.1	2,324.4	0.62
9,491.0	89.87	158.15	6,884.2	-2,778.6	-435.3	2,413.4	1.12
9,581.0	90.13	157.63	6,884.2	-2,861.9	-401.4	2,503.4	0.65
9,671.0	90.66	155.34	6,883.6	-2,944.5	-365.5	2,593.4	2.81
9,760.0	89.96	156.84	6,883.1	-3,025.8	-329.4	2,682.3	1.86
9,850.0	88.72	155.52	6,884.2	-3,108.2	-293.1	2,772.3	2.01
9,940.0	89.25	159.30	6,885.8	-3,191.2	-258.5	2,862.3	1.24
10,030.0	90.40	162.20	6,886.0	-3,276.2	-228.8	2,952.1	3.77

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EOW Completion Report



Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
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Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
10,119.0	89.87	159.12	6,885.8	-3,360.1	-199.4	3,041.0	3.51
10,209.0	88.46	157.10	6,887.1	-3,443.6	-165.8	3,131.0	2.74
10,299.0	89.87	157.36	6,888.4	-3,526.6	-131.0	3,221.0	1.59
10,388.0	90.04	156.05	6,888.5	-3,608.4	-95.8	3,310.0	1.48
10,481.0	89.96	155.25	6,888.5	-3,693.1	-57.5	3,402.9	0.86
10,575.0	90.57	159.65	6,888.1	-3,779.9	-21.4	3,496.9	4.73
10,669.0	90.92	160.09	6,886.9	-3,868.1	10.9	3,590.8	0.60
10,763.0	90.92	159.74	6,885.4	-3,956.4	43.2	3,684.7	0.37
10,857.0	89.34	159.65	6,885.1	-4,044.6	75.8	3,778.7	1.68
10,951.0	89.52	159.03	6,886.1	-4,132.5	109.0	3,872.7	0.69
11,045.0	88.90	159.38	6,887.4	-4,220.4	142.4	3,966.6	0.76
11,139.0	89.96	157.54	6,888.3	-4,307.8	176.9	4,060.6	2.26
11,232.0	89.52	155.96	6,888.7	-4,393.2	213.6	4,153.6	1.76
11,326.0	88.99	154.99	6,890.0	-4,478.7	252.6	4,247.5	1.18
11,420.0	88.72	155.43	6,891.8	-4,564.1	292.0	4,341.4	0.55
11,514.0	90.04	155.34	6,892.8	-4,649.5	331.1	4,435.3	1.41
11,604.0	88.90	156.13	6,893.7	-4,731.6	368.1	4,525.2	1.54
11,694.0	88.11	153.85	6,896.0	-4,813.1	406.2	4,615.0	2.68
11,783.0	88.64	155.96	6,898.6	-4,893.7	443.9	4,703.8	2.44
11,873.0	88.64	157.10	6,900.7	-4,976.2	479.7	4,793.8	1.27
11,963.0	88.81	158.33	6,902.7	-5,059.4	513.8	4,883.8	1.38
12,052.0	89.52	160.44	6,904.0	-5,142.7	545.2	4,972.7	2.50
12,142.0	89.25	160.53	6,905.0	-5,227.5	575.2	5,062.6	0.32
12,232.0	88.99	158.59	6,906.3	-5,311.9	606.7	5,152.6	2.17
12,321.0	89.96	158.68	6,907.2	-5,394.7	639.1	5,241.6	1.09
12,411.0	89.69	157.63	6,907.4	-5,478.3	672.6	5,331.6	1.20
12,500.0	89.16	156.05	6,908.3	-5,560.1	707.6	5,420.5	1.87
12,590.0	88.99	158.07	6,909.8	-5,643.0	742.6	5,510.5	2.25
12,680.0	89.34	159.03	6,911.1	-5,726.7	775.6	5,600.5	1.14
12,769.0	89.25	160.09	6,912.2	-5,810.1	806.6	5,689.5	1.20
12,859.0	89.78	158.95	6,912.9	-5,894.4	838.1	5,779.4	1.40
12,948.0	89.34	157.01	6,913.6	-5,976.9	871.5	5,868.4	2.24
13,038.0	90.13	158.24	6,914.0	-6,060.1	905.7	5,958.4	1.62
13,128.0	89.52	154.38	6,914.3	-6,142.5	941.9	6,048.4	4.34
13,218.0	89.78	156.13	6,914.9	-6,224.3	979.6	6,138.2	1.97
13,307.0	88.90	155.08	6,915.9	-6,305.3	1,016.3	6,227.2	1.54
13,397.0	89.52	158.59	6,917.1	-6,388.0	1,051.7	6,317.1	3.86
13,487.0	89.87	163.87	6,917.6	-6,473.2	1,080.7	6,406.9	5.88
13,576.0	88.90	162.02	6,918.6	-6,558.3	1,106.8	6,495.6	2.35
13,666.0	88.72	161.76	6,920.4	-6,643.8	1,134.7	6,585.4	0.35
13,756.0	89.34	161.05	6,922.0	-6,729.1	1,163.4	6,675.2	1.05
13,845.0	89.25	158.59	6,923.1	-6,812.6	1,194.1	6,764.1	2.77
13,935.0	87.76	157.01	6,925.4	-6,895.9	1,228.1	6,854.1	2.47
14,024.0	89.43	156.57	6,927.6	-6,977.7	1,263.2	6,943.1	1.94
14,114.0	90.22	157.98	6,927.9	-7,060.7	1,297.9	7,033.1	1.80

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EOW Completion Report



Company: Antero	Local Co-ordinate Reference: Well Yoho Unit 2H
Project: Doddridge County WV	TVD Reference: Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site: Melody Pad	MD Reference: Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well: Yoho Unit 2H	North Reference: Grid
Wellbore: Original Wellpath	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
14,204.0	90.57	158.68	6,927.2	-7,144.4	1,331.2	7,123.0	0.87
14,293.0	89.87	159.65	6,926.9	-7,227.5	1,362.8	7,212.0	1.34
14,382.0	88.72	158.07	6,928.0	-7,310.5	1,394.9	7,301.0	2.20
14,472.0	88.90	158.33	6,929.9	-7,394.1	1,428.3	7,391.0	0.35
14,562.0	89.43	157.10	6,931.2	-7,477.3	1,462.5	7,481.0	1.49
14,651.0	88.90	158.24	6,932.5	-7,559.7	1,496.3	7,570.0	1.41
14,741.0	89.08	158.77	6,934.1	-7,643.4	1,529.3	7,659.9	0.62
14,831.0	87.49	157.98	6,936.8	-7,727.0	1,562.4	7,749.9	1.97
14,921.0	88.81	157.54	6,939.7	-7,810.3	1,596.4	7,839.8	1.55
15,010.0	87.58	156.75	6,942.5	-7,892.2	1,631.0	7,928.8	1.64
15,100.0	88.46	157.89	6,945.6	-7,975.2	1,665.7	8,018.7	1.60
15,190.0	89.60	157.98	6,947.1	-8,058.6	1,699.5	8,108.7	1.27
15,279.0	90.04	158.42	6,947.4	-8,141.3	1,732.5	8,197.7	0.70
15,369.0	89.60	157.45	6,947.7	-8,224.7	1,766.3	8,287.7	1.18
15,459.0	89.16	156.84	6,948.6	-8,307.6	1,801.3	8,377.7	0.84
15,548.0	89.52	158.42	6,949.7	-8,389.9	1,835.2	8,466.7	1.82
15,638.0	88.99	157.19	6,950.8	-8,473.2	1,869.2	8,556.7	1.49
15,728.0	90.92	158.59	6,950.9	-8,556.6	1,903.0	8,646.7	2.65
15,818.0	90.48	158.51	6,949.8	-8,640.3	1,935.9	8,736.7	0.50
15,907.0	90.57	157.45	6,949.0	-8,722.8	1,969.3	8,825.7	1.20
15,997.0	90.66	156.31	6,948.0	-8,805.6	2,004.6	8,915.6	1.27
16,087.0	90.84	154.81	6,946.8	-8,887.5	2,041.9	9,005.5	1.68
16,176.0	90.48	158.51	6,945.8	-8,969.2	2,077.1	9,094.5	4.18
16,266.0	89.69	161.23	6,945.7	-9,053.7	2,108.1	9,184.4	3.15
16,355.0	90.92	159.47	6,945.2	-9,137.5	2,138.0	9,273.4	2.41
16,445.0	90.75	157.98	6,943.9	-9,221.4	2,170.7	9,363.3	1.67
16,535.0	90.22	156.48	6,943.1	-9,304.4	2,205.5	9,453.3	1.77
16,625.0	89.34	157.10	6,943.5	-9,387.1	2,241.0	9,543.3	1.20
16,714.0	90.04	157.54	6,944.0	-9,469.2	2,275.3	9,632.3	0.93
16,804.0	89.52	157.28	6,944.3	-9,552.3	2,309.9	9,722.3	0.65
16,821.0	89.43	157.89	6,944.5	-9,568.0	2,316.3	9,739.3	3.63
16,880.0	90.50	158.00	6,944.5	-9,622.7	2,338.5	9,798.3	1.82

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Company:	Antero	Local Co-ordinate Reference:	Well Yoho Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Site:	Melody Pad	MD Reference:	Precision 525: GL 1135' + KB 19' @ 1154.0usft
Well:	Yoho Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
6,707.0	6,439.1	-324.2	-1,209.0	SMR	
6,946.0	6,609.1	-469.0	-1,287.4	MDLX	
7,157.0	6,743.6	-628.9	-1,273.9	BRKT	
7,211.0	6,773.1	-671.2	-1,257.7	TLLY	
7,301.0	6,813.9	-744.9	-1,226.3	HMLN	
7,329.0	6,824.3	-768.6	-1,215.7	MRCL_HOT	

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/22/2015
Job End Date:	1/3/2016
State:	West Virginia
County:	Doddridge
API Number:	47-017-06533-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Yoho Unit 2H
Longitude:	-80.75934400
Latitude:	39.35851900
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,912
Total Base Water Volume (gal):	12,715,416
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	ANTERO RESOURCES	Water					
			Water	7732-18-5	100.00000	89.93863	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	5.28231	
			Aluminum Oxide	1344-28-1	1.10000	0.05816	
			Iron Oxide	1309-37-1	0.10000	0.00529	
			Titanium Oxide	13463-67-7	0.10000	0.00529	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	3.57000	
			Aluminum Oxide	1344-28-1	1.10000	0.03931	
			Iron Oxide	1309-37-1	0.10000	0.00357	
			Titanium Oxide	13463-67-7	0.10000	0.00357	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	0.85412	
			Aluminum Oxide	1344-28-1	1.10000	0.00941	
			Titanium Oxide	13463-67-7	0.10000	0.00086	
			Iron Oxide	1309-37-1	0.10000	0.00086	

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GA-6A	C&J Well Services	Gelling Agents				
			Guar Gum	9000-30-0	60.00000	0.04125
			Petroleum Distillates	64742-47-8	60.00000	0.04125
			Surfactants	Proprietary	10.00000	0.00688
FR-16	C&J Well Services	Friction Reducer				
			Distillates (Petroleum), Hydrotreated Light	64742-47-8	45.00000	0.02705
			Ethylene Glycol	107-21-1	5.00000	0.00301
HC-15	C&J Well Services	Bulk Acid				
			Hydrochloric Acid	7647-01-0	15.00000	0.02867
SI-6	C&J Well Services	Paraffin & Scale Additives				
			Methanol	67-56-1	100.00000	0.01182
			Phosphonic Acid Salt	Proprietary	6.00000	0.00071
			Monoethanolamine hydrochloride	2002-24-6	2.00000	0.00024
			Ammonium Chloride	12125-02-9		
AQUCAR DB 20	C&J Well Services	Biocides				
			Polyethylene glycol	25322-68-3	54.50000	0.00505
			2,2-Dibromo-3-nitrilo-propionamide (DBNPA)	10222-01-2	20.00000	0.00185
			Sodium bromide	7647-15-6	4.00000	0.00037
			Dibromoacetone	3252-43-5	3.00000	0.00028
SV-1	C&J Well Services	Paraffin & Scale Additives				
			Alkanes, C10-24 branched and linear	848301-67-7	90.00000	0.00215
			Dodecane	112-40-3	40.00000	0.00095
			Tetradecane	629-59-4	30.00000	0.00072
			Undecane	1120-21-4	30.00000	0.00072
			Tridecane	Proprietary	30.00000	0.00072
			Hydrocarbons	Proprietary	25.00000	0.00060
BR-11	C&J Well Services	Gel Breakers				
			Ammonium Persulfate	7727-54-0	92.00000	0.00116
			Silica, Crystalline-Quartz	14808-60-7	1.00000	0.00001
CI-3	C&J Well Services	Acid Corrosion Inhibitors				
			Ethylene Glycol	107-21-1	40.00000	0.00019
			Dimethylformamide	68-12-2	20.00000	0.00009
			2-Butoxyethanol	111-76-2	15.00000	0.00007
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	15.00000	0.00007
			Cinnamaldehyde	104-55-2	15.00000	0.00007
			1-DECANOL	112-30-1	5.00000	0.00002
			Nonyphenol (branched), ethoxylated	127087-87-0	5.00000	0.00002
			1-OCTANOL	111-87-5	2.50000	0.00001
			Triethyl Phosphate	78-40-0	2.50000	0.00001

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			Isopropyl Alcohol	67-63-0	2.50000	0.00001
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.						
Other Ingredients	C&J Well Services	Other Ingredients				
			Water	7732-18-5	85.00000	0.16248
			Copolymer	Proprietary	35.00000	0.02104
			Water	7732-18-5	31.00000	0.01864
			Water	7732-18-5	96.00000	0.01135
			Organo Clay	Proprietary	5.00000	0.00344
			Surfactant	Proprietary	5.00000	0.00344
			Water	7732-18-5	32.00000	0.00296
			Poly(oxy-1,2-ethanediyl), a-hydro-w-hydroxy-, mono-C10-14-alkyl esthers, phosphates	68585-36-4	3.00000	0.00180
			Surfactant Blend	Proprietary	3.00000	0.00180
			Alcohols, C12-18, ethoxylated propoxylated	69227-21-0	2.00000	0.00120
			Surfactant Blend	Proprietary	1.00000	0.00060
			Proprietary	Proprietary	12.80000	0.00016
			2,2-Dibromomalonamide	73003-80-2	1.00000	0.00009
			Monobromo-3-nitropropionamide	1113-55-9	1.00000	0.00009
			2-Propenamide as residual	79-06-1	0.10000	0.00006
			Proprietary	Proprietary	1.00000	0.00001
			Proprietary	Proprietary	0.70000	0.00001

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)